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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/784,815

02/24/2004

Dietrich Scherzer

54166

1166

26474

7590

07/09/2009

NOVAK DRUCE DELUCA + QUIGG LLP

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EXAMINER

ZEMEL, IRINA SOPHIA

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

07/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/784,815

Applicant(s)

SCHERZER ET AL.

Examiner

Irina S. Zemel

Art Unit

1796

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 5, 14, 24-40 and 42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 14, 24-40 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

The rejections not addressed below are deemed withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 42 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claimed temperature being "a temperature higher by from 2 to 12°C than the temperature at which a closed-cell foam is formed," does NOT define any specific temperature since it is not defined with respect to any specific foam. Thus the claimed temperature can not be determined and encompasses virtually any temperature under which a polymer foam, regardless of the polymer nature, can be extrusion processed.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 42 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by US Patent 5,017,622 to Bland et al., (hereinafter "Bland").

Bland discloses foams obtained by extruding a melt comprising a high-temperature-resistant thermoplastic such as polyether sulfones, at least one blowing agent, and a foaming plastic comprising a cell-opener such as a pulverulent solid (specifically talc, which correspond to the "pulverulent solid as defined in the instant

specification on page 8, for example) into the open atmosphere. See, for example, illustrative example2. Since, as discussed above, the extrusion temperature is so indefinite, inherently the processing temperatures of the referenced illustrative example (about 240 C) must be a temperature higher by from 2 to 12°C than the temperature at which a closed-cell foam based for at least some of millions of different polymers (such as polystyrenes, polyolefins, fluorinated polyolefins, etc., etc., etc.,) that can be foamed via extrusion is formed.

The invention as claimed, thus, is fully anticipated by the disclosure of the reference.

Claim Rejections - 35 USC § 102/103

Claims 1, 5, 14, 24-40 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Patent 7,045,082 to Deitzen et al., (hereinafter Deitzen), or under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 1333051 to BASF (document corresponding to US '082 patent).

The rejection stands as per reasons of record.

Response to Arguments

Applicant's arguments filed 3-18-2009 have been fully considered but they are not persuasive.

The applicants arguments with respect to the rejection of claims over Deitzen are not persuasive for the same reasons discussed in the previous office action. The

declaration of Dr. Dietzen was discussed in the prior office action. It is noted again, that the declaration does not contain data corresponding to the examples of the Deitzen reference, nor, for that matter any experimental data. The examiner has discussed the conclusions presented in the declaration in the previous office action, incorporated herein by reference. In the instant response the applicants, once again, argue that the examples of the reference do not produce open cell foams with required amount of open cells. The arguments, once again, are based on "comparable temperature behavior" of the polymer used in examples disclosed in the reference and in the instant application. The examiner, once again, is not convinced by this arguments. The applicants provided data sheets for the actual polymers used in the reference and in the instant invention. As can be seen from the data, and as stated by the applicants, the properties are comparable. However, the properties are not identical. Neither for viscosity (which is indicative of differences in molecular weights, and, thus, in melt viscosity behavior), nor in the processing temperatures. As it can be seen from the provided information, the initial processing temperatures for these two polymers differ by 10 C. In the process, where, as disclosed in the instant application, the critical difference is the difference of between **2 and 8 C** in processing conditions, "comparable" behavior, which may differ by as high as 10 C in processing conditions, is not sufficient for conclusion that the examples of the reference can be directly compared to the examples of the instant application. In addition, it is also clear that the processing conditions are different between the instant application and the reference since the reference does not use the additives used in the instant application (see

applicants arguments regarding new claim 42), which may or may not have an additional effect for the foams disclosed in the reference as compared to the examples of the instant specification. Once again, when, as presented by the applicants, the difference of as low as 2 C in the processing conditions results in completely different foam structure, arguments regarding "comparable" behavior and "comparable" processing conditions are not sufficient to replace the factual evidence that the foams obtained in the reference by processing a specific polymer at specific temperatures of 249.4 and 250.2 and specific other conditions.

With respect to the arguments regarding claim 42, this claims is NOT rejected over the disclosure of Dietzen, thus the arguments are moot.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Irina S. Zemel/
Primary Examiner, Art Unit 1796

Irina S. Zemel
Primary Examiner
Art Unit 1796

ISZ